

REMARKS

I. Status of Claims

Claims 12-14 and 16-18 have been amended.

Claims 1-18 remain pending in the application.

In the Office Action, the Examiner rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,459,906 to Yang.

Claims 12 and 13 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,885,406 to Yui et al.

Claims 14-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yui et al.

Claims 2-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yang in view of Yui et al.

II. Claim Rejections – 35 U.S.C. § 102(e)

The Examiner rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Yang.

With respect to independent claim 1, Yang does not disclose or teach an apparatus for displaying a television video signal in a mobile terminal, comprising a “video processing means for, in said television mode, converting said video signal from said decoder into digital video data, processing and storing the converted digital video data on a frame basis, outputting stored video data of a previous frame in a frame period and then outputting said user data,” as recited.

Yang discloses a multiplexer (36) that selects video signals R, G and B input from a NTSC decoder (26) when a video selecting signal (SEL-M) output from a mobile station processor (30) is at a low state. The R, G and B signals from the NTSC decoder (26) are applied to an analog-to-digital converter (42) of a display unit (40) via the multiplexer (36). An analog-to-digital converter (42) in the display unit (40) converts the selected video signals R, G and B into digital signals. The multiplexer (36) also receives an on-screen display (34) video signals R, G and B when a video selecting signal (SEL-M) output from the mobile

station processor (30) is at a low state (see col. 5, lines 11-16). The on-screen display (34) generates a character video signal corresponding to a character generating control signal CD input from the mobile station processor (30) and outputs the character video signal to the multiplexer (36). When the selecting signal (SEL-M) is in the high state, at an appropriate time, the multiplexer (36) switches its output to a display unit (40) between (a) the decoded composite video signal input at terminals A1-A3 and (b) the character video signal outputted from the on-screen display (34) (see col. 5, lines 51-59). The character video signal outputted from the multiplexer (36) to the display unit (40) allows a received message to be displayed at the bottom portion (character display region) of the TV image (see col. 5, lines 51-63).

The multiplexer (36) of Yang selectively transmits TV video signals and the video signal of the on-screen display (34) to the display unit. However, there is nothing in Yang that discloses that the multiplexer (36) converts the video signal from the decoder into digital video data. The analog-to-digital converter (42) in the display unit of Yang converts the video signal into a digital signal. Moreover, there is nothing in Yang that discloses that the multiplexer (36) processes and stores the converted digital video data on a frame basis, outputs the stored video data of **a previous frame in a frame period and then outputs user data**. Accordingly, Yang does not disclose or teach the claimed elements of independent claim 1. Therefore, the rejection of claim 1 should be withdrawn.

With respect to independent claim 12, Yui et al. does not disclose a mobile cellular communication terminal, as claimed in amended claim 12, but rather a remote controller (see Fig. 8 of Yui et al.). Accordingly, Yui et al. is not available as a reference under 35 U.S.C. § 102. Further, Yui et al. does not disclose or teach a method for displaying a television video signal in a mobile terminal with a display unit, the method comprising “outputting video data of a previous frame stored in said memory to said video data display area of said display unit in a frame period and then outputting said user data stored in said memory to said user data display area of said display unit upon completing the output of said video data of said previous frame,” as recited.

Yui et al. discloses a shared memory (10) that stores display data and images outputted from resolution conversion parts 7a to 7d (see col. 5, lines 21-22 and lines 31-32). An image drawing part 18 is used for generating an On Screen Display (OSD) window, an electronic program guide (EPG) window, and a Graphical User Interface (GUI) window, such as a data telecast window, in the shared memory (10) (see col. 6, lines 5-9). Yui et al. further discloses a display control part (13) that performs control of display driving and conversion of display format according to characteristics of the display device (14) in synchronism with a frame rate of the display device (see col. 5, lines 36-37). However, there is nothing in Yui et al. that discloses outputting video data of a **previous frame** stored in said memory to the video data display area. Further, the character data of Yui et al. is data that is telecast and is not analogous to **user data stored in the memory**. Therefore, Yui et al. does not disclose or teach then outputting **user data stored in said memory** to said **user data display area** of said display unit upon completing output of said video data of said previous frame.

In view of the above arguments, Yui et al. does not disclose the claimed elements of independent claim 12. Therefore, the rejection of claim 12 should be withdrawn.

With respect to dependent claim 13, Yui et al. does not disclose or teach “in response to a copy command, copying a desired area of said user data stored in said memory and displaying the copied data area in said video data display area,” as recited.

Yui et al. discloses a focus area that a user selects of data telecasting. The selection of the focus area is implemented when a user depresses a read button out of color buttons of a remote controller. When the focus area is selected, a central processing unit performs a scale-up display processing of a focused character area, in which character telecast is one-way information from a television station to viewers (see col. 14, lines 47-55). The character telecast of Yui et al. is not analogous to user data stored in said memory. Therefore, there is nothing in Yui et al. that discloses that the selection of focus area of data telecasting

comprises copying a desired area of **user data stored in said memory** and displaying the copied data area in said video data display area.

In view of the above arguments, Yui et al. does not disclose the claimed elements of dependent claim 13. Therefore, the rejection of claim 13 should be withdrawn

III. Claim Rejections – 35 U.S.C. § 103(a)

- a. The Examiner rejected claims 14-18 under 35 U.S.C. § 103(a) as being unpatentable over Yui et al.

With respect to dependent claims 14 and 15, Yui et al. does not disclose or teach a method for displaying a television video signal in a mobile terminal, the method comprising “in response to a rotation command, rotating and scaling up a currently displayed picture and displaying the resulting picture on said display unit at a full screen size,” as recited in claim 14, or “wherein the rotation is made by 90° or substantially 90°,” as recited in claim 15.

The Examiner has relied on taking Office Notice in alleging, for example, that rotating a displaying image on a display device to a desired position is well known in the art because it enables the viewer to see a better view of the image. According to M.P.E.P. § 2144.03, in limited circumstances, it is appropriate for an examiner to take official notice of facts not in the record or to rely on “common knowledge” in making a rejection, however such rejections should be judiciously applied.

Even if it is arguably “common knowledge” to rotate a display image on a display device, we feel the Examiner has not provided a basis in his conclusion that such rotating of a display image is conducted on a display device of a mobile terminal. Applicants respectfully request that the Examiner cite a competent prior art reference in substantiation of the conclusion, provide a personal affidavit, or else withdraw the rejection. Moreover, the rejection of dependent claims 14 and 15, which incorporate the limitations of their base claim 12, should also be withdrawn at least based on the above arguments with respect to claim 12.

With respect to independent claim 16, Yui et al. does not disclose or teach a method for displaying a television video signal in a mobile terminal, the method comprising “outputting video data of a previous frame stored in said memory to said video data display area of said display unit in a frame period and then outputting said user data stored in said memory to said user data display area of said display unit upon completing the output of said video data of said previous frame,” or “in response to a screen capture command, outputting a currently displayed picture as a still picture, outputting said still picture to a control unit of said mobile terminal to store it, and then returning to said step d),” as recited.

As discussed above with respect to claim 12, there is nothing in Yui et al. that discloses outputting video data of a **previous frame** stored in said memory to said video data display area. Further, the character data of Yui et al. is data that is telecast and is not analogous to **user data stored in the memory**. Therefore, Yui et al. does not disclose or teach then outputting **user data stored in said memory** to said **user data display area** of said display unit upon completing output of said video data of said previous frame.

Moreover, with respect to independent claim 16, the Examiner again relied on taking Office Notice in alleging, for example, that using a capture command to capture a video picture is well known in the art because it enables the picture to be saved and viewed in later time. Applicants again respectfully request that the Examiner cite a competent prior art reference in substantiation of the conclusion, provide a personal affidavit, or else withdraw the rejection.

With respect to independent claim 17, there is nothing in Yui et al. that discloses “outputting video data of a previous frame stored in said memory to said video data display area of said display unit in a frame period and then outputting said user data stored in said memory to said user data display area of said display unit upon completing the output of said video data of said previous frame,” or “in response to a screen adjustment command, rotating and scaling up a currently displayed picture and displaying the resulting picture on said display unit at a full screen size,” as recited.

Again, as discussed above with respect to claim 12, there is nothing in Yui et al. that discloses outputting video data of a **previous frame** stored in said memory to said video data display area. Further, the character data of Yui et al. is data that is telecast and is not analogous to **user data stored in the memory**. Therefore, Yui et al. does not disclose or teach then outputting **user data stored in said memory** to said **user data display area** of said display unit upon completing output of said video data of said previous frame.

In view of the above arguments, Yui et al. does not disclose the claimed elements of dependent claim 17. Therefore, the rejection of claim 17 should be withdrawn.

With respect to independent claim 18, there is nothing in Yui et al. that discloses “outputting video data of a previous frame stored in said memory to said video data display area of said display unit in a frame period and then outputting said user data stored in said memory to said user data display area of said display unit upon completing the output of said video data of said previous frame,” or “in response to selection of an exit menu, exiting from said television mode and entering a communication mode,” as recited.

As discussed above with respect to claim 12, there is nothing in Yui et al. that discloses outputting video data of a **previous frame** stored in said memory to said video data display area. Further, the character data of Yui et al. is data that is telecast and is not analogous to **user data stored in the memory**. Therefore, Yui et al. does not disclose or teach then outputting **user data stored in said memory** to said **user data display area** of said display unit upon completing output of said video data of said previous frame.

Also, with respect to independent claim 18, Yui et al. discloses a cancel button (32). When a menu is not selected, Yui et al. discloses that it is determined whether a cancel mode is selected on the cancel button (32) of the remote controller (20). When the cancel mode is selected, the CPU terminates a scale-up display processing of a focused character area and returns to a contour focus presentation state of the character areas in the data telecasting window. However, the cancel button (32) of Yui et al. does not exit from a television mode and enters a communication mode.

In view of the above arguments, Yui et al. does not disclose the claimed elements of independent claim 18. Therefore, the rejection of claim 18 should be withdrawn.

- b. The Examiner rejected claims 2-11 under 35 U.S.C. § 103(a) as being unpatentable over Yang in view of Yui et al.

With respect to dependent claim 2, the alleged combination of Yang and Yui et al. does not disclose or teach “a first memory for storing said user data; second and third memories for storing said television video data on a frame basis;” or “outputting the video data of the previous frame stored in said third or second memory and then outputting said user data stored in said first memory upon completing the output of said video data of said previous frame,” as recited.

Yang discloses a video memory or video ROM and a video memory controller that generates a complex video signal (see col. 6, lines 54-55). However, there is nothing in Yang that discloses a first memory for storing said user data; second and third memories for storing said television video data on a frame basis; and outputting the video data of the previous frame stored in said third or second memory and then outputting said user data stored in said first memory upon completing the output of said video data of said previous frame.

Yui et al. does not supply at least the above-noted deficiencies of Yang. Yui et al. discloses a logical address map of the memory in Figure 3. Yui et al. further discloses a shared memory (10) that is composed of five planes, which consists of four motion picture planes and one plane for Graphical User Interface data. However, there is nothing in Yui et al. that discloses a first memory for storing said user data; and second and third memories for storing said television video data on a frame basis. Further, there is nothing in Yui et al. that discloses outputting video data of a **previous frame** stored in said memory to said video data display area. The character data of Yui et al. is data that is telecast and is not analogous to **user data stored in the memory**. Therefore, Yui et al. does not disclose or teach then

outputting **user data stored in said memory** to said **user data display area** of said display unit upon completing output of said video data of said previous frame.

In view of the above arguments, the alleged combination of Yang and Yui et al. does not disclose the claimed elements of dependent claim 2. Therefore, the rejection of claim 2 should be withdrawn. Moreover, the rejection of dependent claims 3-8, which incorporate the limitations of base claim 1 and dependent claim 2, should also be withdrawn at least based on the above arguments.

With respect to independent claim 9, the alleged combination of Yang and Yui et al. does not disclose or teach “an analog/digital (A/D) converter for converting an output video signal from said decoder into digital video data;” “a first memory for storing user data from a control unit of said mobile terminal; second and third memories for storing video data on a frame basis;” or “outputting the video data of a previous frame stored in said third memory, and outputting said user data stored in said first memory upon completing the output of said video data of said previous frame,” as recited.

The Examiner alleged that the resolution conversion part 7 of Yui et al. inherently includes an A/D converter. According to the Examiner it would have been obvious to one of ordinary skill in the art at the time of the invention was made to include an A/D converter if the signal coming out of the decoder (5) is in analog form because the resolution conversion part 7 operates in digital domain.

Yang discloses an analog-to-digital converter (42) comprised in the display unit (40) that converts the selected video signals R, G and B into digital signals. The selected video signals R, G and B are received from a multiplexer (36) which selects video signals from the NTSC decoder (26) or on-screen display (34).

Yui et al. discloses input processing parts (6a, 6b) that receive a picture input source from outside. When the received data is an analog signal from a computer, each input processing part (6a, 6b) incorporates an A/D converter and a Phase Locked Loop (PLL) for sampling image data. When the received data is a digital signal of Low Voltage Differential

Signaling (LVDS) or the like, each input processing part (6a, 6b) incorporates a decoder thereof and a differential buffer. Further, when the received data is a composite signal of TV or DVD, each input processing part (6a, 6b) incorporates an NTSC video decoder and a color conversion circuit for converting YUV signals to RGB signals (see col. 4, line 59 – col. 5, line 3). The resolution conversion parts (7a to 7d) of Yui et al. perform scale-up, scale-down, and 1:1 processes on image data. Since the input processing parts (6a, 6b) incorporates an A/D converter to convert received data, the resolution conversion parts (7a to 7d) does not inherently include an A/D converter to convert an output video signal from the picture decoders (5a, 5b). The Examiner's rejection to claim 9 is based on mere conclusions. Applicants respectfully submit that in relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *See* M.P.E.P. § 2112,

Also, with respect to independent claim 9, Yang discloses a video memory or video ROM and a video memory controller that generates a complex video signal (see col. 6, lines 54-55). However, there is nothing in Yang that discloses a first memory for storing said user data; second and third memories for storing said television video data on a frame basis; and outputting the video data of the previous frame stored in said third or second memory and then outputting said user data stored in said first memory upon completing the output of said video data of said previous frame.

Yui et al. does not supply at least the above-noted deficiencies of Yang. Yui et al. discloses a logical address map of the memory in Figure 3. Yui et al. further discloses a shared memory (10) that is composed of five planes, which consists of four motion picture planes and one plane for Graphical User Interface data. However, there is nothing in Yui et al. that discloses a first memory for storing user data from a control unit of said mobile terminal; and second and third memories for storing said video data on a frame basis. Further, there is nothing in Yui et al. that discloses outputting video data of a **previous frame**

stored in said memory to said video data display area. The character data of Yui et al. is data that is telecast and is not analogous to **user data stored in the memory**. Therefore, Yui et al. does not disclose or teach then outputting **user data stored in said memory** to said **user data display area** of said display unit upon completing output of said video data of said previous frame.

In view of the above arguments, the alleged combination of Yang and Yui et al. does not disclose or teach the claimed elements of independent claim 9. Therefore, the rejection of claim 9 should be withdrawn. The rejection of dependent claims 10 and 11, which incorporate the limitations of base claim 9, should also be withdrawn at least based on the above arguments.

Statement of Common Ownership Under 35 U.S.C. § 103(c)


The present application and Yang were, at the time the present application was made, owned by Samsung Electronics, Co. Ltd. Thus, since Yang (which is also assigned to Samsung Electronics, Co. Ltd) has a published date of October 1, 2002, and the present invention has a priority filing date of September 17, 2002, Yang does not qualify as prior art under 35 U.S.C. § 103(c). With reference to M.P.E.P. § 706.02(1)(2)(II), the above statement alone is sufficient evidence to disqualify Yang from being used in a rejection under 35 U.S.C. § 103(a). Nonetheless, a verified translation of Korean Patent Application 2002-56641 filed September 17, 2002 will follow.

CONCLUSION

Applicants submit that such arguments are fully responsive to the Office Action dated July 20, 2006 and respectfully requests the asserted grounds of rejections be withdrawn based on such arguments.

In view of the above, it is believed that the above-identified application is in condition for allowance, and notice to that effect is respectfully requested. Should the Examiner have any questions, the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

Respectfully submitted,


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